

Appln. No. Serial No. 10/049,793

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Listing of Claims:

1. (Currently amended) An information delivering system for delivering information through a communication network constructed by interconnecting communication lines, said information delivering system comprising:

an information delivering server which is connected to said communication network and configured to deliver three-dimensional content provided for presentation of said information; and

a client terminal which is configured to receive and display ~~units of said~~ information through said communication network and which includes a skinning data calculation means,

wherein said three-dimensional content is generated by creating a three-dimensional virtual space as projected onto a plane and arranging an object(s) indicative of said information within said three-dimensional space, and

wherein when said information delivering server transmits three-dimensional content separately as a skin component which deforms with motion and a bone component which does not deform with motion, said skinning data calculation means makes it possible to perform rendering by calculating weight factors with coordinates given to said bone component corresponding to respective coordinates given to said skin component in order to determine a profile of said skin component during reproduction of said three-dimensional content.

2. (Currently amended) The information delivering system as in claim 1 wherein ~~a position of said object(s) is provided in order that the position thereof is associated with said content of said information.~~

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3. (Original) The information delivering system as in claim 1 wherein said object(s) is a polyhedron each of whose facets is used to display a unit of said information in order that the respective units of said information are shown by turning said polyhedron.

4. (Currently amended) The information delivering system as in claim 1 wherein ~~a direction~~ said information of said object(s) ~~as arranged in a certain direction to~~ provides a hierarchical representation of said information corresponding to said positions of said object(s).

5. (Original) The information delivering system as in claim 1 further comprising:

a content generation means which is configured to generate said three-dimensional content; and

a content transfer means which is configured to store said three-dimensional content as generated in said information delivering server.

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6. (Currently amended) The information delivering system as in claim 1 further comprising:

a property information storage device which is configured to store the property information of said three-dimensional content;

a skeleton storage device which is configured to store the content of invariable components among said three-dimensional content;

a parameter storage device which is configured to store parameters which are externally designated;

a property information management means which is configured to control the management of said property information stored in said property information storage device;

a skeleton registration means which is configured to store said content of invariable components in said skeleton storage device;

a parameter setting means which is configured to set up said parameters;

a parameter registration means which is configured to register said parameters in said parameter storage device; and

a content providing means which is configured to provide said three-dimensional content for customers with reference to said skeleton storage device and said parameter storage device.

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7. (Currently amended) The information delivering system as in claim 1 wherein said client terminal further comprises an interpolation means and wherein, when said information delivering server transmits three-dimensional content including a start position and an end position of a moving object and a time as designated for moving from said start position to said end position, said interpolation means performs interpolation of images of said moving object by defining a plurality of frames with a predetermined time interval between said start position and said end position and dividing the a distance between said start position and said end position by the a number of said frames during the reproduction of said three-dimensional content.

8. (Cancelled).

9. (Original) The information delivering system as in claim 1 wherein said client terminal further comprises an external file combination means which is configured to combine an external file as stored in said client terminal when said information delivering server transmits three-dimensional content including a request for a linkage to said external file.

10. (Original) The information delivering system as in claim 1 wherein said three-dimensional content is composed of a plurality of project files and wherein said information delivering server further comprises a download management means which is configured to transmit the project file corresponding to a scene as requested from said client terminal for reproducing the scene.

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11. (Currently amended) An information delivering method for delivering information through a communication network constructed by interconnecting communication lines, said information delivering system comprising:

a step of delivering three-dimensional content indicative of said information;
and

a step of displaying ~~units of~~ said information through said communication network; and

a step of skinning data calculation,

wherein said three-dimensional content is generated by creating a three-dimensional virtual space as projected onto a plane and arranging an object(s) indicative of said information in said three-dimensional space, and

wherein when said three-dimensional content is transmitted separately as a skin component which is deformed with motion and a bone component which is not deformed with motion, said step of skinning data calculation makes it possible to perform rendering by calculating weight factors with coordinates as given to said bone component corresponding to respective coordinates as given to said skin component in order to determine a profile of said skin component during reproducing said three-dimensional content.

12. (Currently amended) The information delivering method as in claim 11 wherein a position of said object(s) is provided in order that the position thereof is associated with ~~said content of~~ said information.

13. (Currently amended) The information delivering method as in claim 11 wherein said object(s) is a polyhedron each of whose facets is used to display a unit of said information in order that the respective units of said information are shown by turning said polyhedron.

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14. (Currently amended) The information delivering method as in claim 11 wherein ~~a direction the information~~ of said object(s) ~~arranged in a certain direction~~ provides a hierarchical representation of said information corresponding to the positions of said object(s).

15. (Currently amended) The information delivering method as in claim 11 further comprising:

- a step of generating said three-dimensional content; and
- a step of storing said three-dimensional content as generated ~~in said information delivering server.~~

16. (Currently amended) The information delivering method as in claim 11 further comprising:

- a step of storing ~~the~~ property information of said three-dimensional content;
- a step of storing ~~the~~ content of invariable components among said three-dimensional content;
- a step of storing parameters which are externally designated;
- a step of registering said parameters in a parameter storage device; and
- a step of providing said three-dimensional content for customers with reference to said ~~skeleton storage device~~ content of invariable components and said ~~parameters storage device.~~

17. (Currently amended) The information delivering method as in claim 11 further comprising a step of interpolating frames, ~~at said client terminal,~~ with a predetermined time interval between a start position and an end position by ~~the~~ a number of said frames during ~~reproducing~~ reproduction of said three-dimensional content, when said ~~information delivering server transmits~~ three-dimensional content

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~~including~~ includes said start position and said end position of a moving object and a time designated for moving from said start position to said end position.

18. (Cancelled).

19. (Currently amended) The information delivering method as in claim 11 further comprising a step for combining, at said a client terminal, an external file as stored in said client terminal when said ~~information-delivering server transmits~~ three-dimensional content ~~including~~ includes a request for a linkage to said external file.

20. (Currently amended) The information delivering method as in claim 11 wherein said three-dimensional content is composed of a plurality of project files ~~and wherein said information-delivering server further comprises~~ comprising a download management step for transmitting the project file corresponding to a scene as requested from said a client terminal for reproducing the scene.